## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

09-146119

(43)Date of publication of application: 06.06.1997

(51)Int.CL

G02F 1/136 H01L 29/786 H01L 21/336

(21)Application number: 07-307644

(71)Applicant: SANYO ELECTRIC CO LTD

(22)Date of filing:

27.11.1995

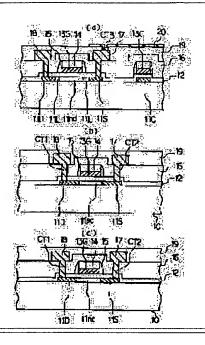
(72)Inventor: JINNO MASASHI

## (54) LIQUID CRYSTAL DISPLAY DEVICE

## (57)Abstract:

PROBLEM TO BE SOLVED: To improve a display grade by changing the threshold characteristic of a p-SiTFT in a pixel part and driving circuit part.

SOLUTION: The channel region 11nd of the pixel part is undoped and is formed as the channel region 11p of a shift register part. The voltage between the gate and drain during a non-selection period is negative in the pixel part and, therefore, an off current is shut off and the on-current for high mobility is increased. The dealing with higher fineness and larger screen is possible. Since the threshold increases in the shift register part, the off-current is eliminated and a malfunction is prevented.



## LEGAL STATUS

[Date of request for examination]

18.04.2000

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office